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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,806	10/11/2001	Jeffrey F. Krizan	ITOCHU P-1 / 500921.20001	9185

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EXAMINER
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MANLOVE, SHALIE A

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 05/15/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicati n No.

09/975,806

Applicant(s)

KRIZAN, JEFFREY F.

Examiner

Shalie A. Manlove

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities: On page 8, line 25, the term "red" should be --read --.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 15 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The Specification (page 5, line 24- page 6, line 3) teaches the limitation of claim 15 to be the properties of aqueous slurry, and not the powder as claimed.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

5. Claims 12, 19 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 12, line 3, the term "fumed silica esters" is vague and unclear.

Explanation is required.

In claim 19, line 2, and claim 22, line 1, the term "coatings" should be omitted because it is not a substrate.

Appropriate correction is required.

In claim 15, line 1; dependency should be to claim 14 instead of claim 13.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 3-4, 7, 10, are rejected under 35 U.S.C. 102(b) as being anticipated by Kreth et al (US 4885034).

Kreth discloses a method of making a composite titanium dioxide pigment with barium sulfate, which can be in a powder (col. 1, lines 10-21; col. 2, line 21-25), the composition of barium sulfate would be 1 to 25% or preferably 5 to 15% by weight, inherently Kreth teaches titanium dioxide would be 99 to 75% or 95 to 85% by weight of the composition (col. 2, line 35-39). Kreth also discloses the pigment composition to further comprise a dispersant (col. 3, line 24-25 and 35-38) of which the composition varies from 0.5 to 20% (col. 3, lines 43-46).

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8. Claims 1-3, 5, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Alessandroni (US 2212629).

Alessandroni teaches a pigment composition of titanium dioxide and barium sulfate, the barium sulfate is natural barytes or blanc fixe (page 3, col. 5, lines 5-8) and is a titanium dioxide stabilizer or anti-agglomerate effective amount (col. 5, line 4-31; col. 6, line 40-51), the reference also teaches the pigment in the form of slurry.

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966),

that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 8-9, 11, 13, 16, and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kreth et al (US 4885034).

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Kreth discloses overlapping percent weight ranges of the barium sulfate pigment composition and dispersant. In the case where the claimed ranges “overlap or lie inside ranges disclosed by the prior art” a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976).

11. Claims 5-6, 13-15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kreth et al (US 4885034) as applied to claim 1 above, and further in view of Dietz (US 3549396).

Dietz teaches a pigment in the form of slurry (col. 3, lines 42-44, 51-52) and the pigment contains total solids content of 85 % or less (col. 2, lines 70-73) wherein the pigment is any titanium dioxide pigment including those mixed with barium sulfate.

It would have been obvious to one of ordinary skill in the art to prepare pigment slurry as taught by Dietz using the pigment of Kreth. The resulting slurry composite overlaps that which is claimed, therefore one of ordinary skill would expect the viscosity, sieve residue and temperature to overlap those claimed absent any showing to the contrary. With respect to the pH, all indications are neutral; therefore pH must be 7.

It would also have been obvious to one of ordinary skill in the art to prepare the composition in the form of slurry, of which would display the properties of pH and viscosity to produce a free-flowing, anti-agglomerate high solids content pigment as taught by Dietz.

In addition, it is notoriously well known that the composite titanium dioxide pigment with barium sulfate is used as a pigment that enhances opacity and brightness for substrates such as

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as paper and plastic. Therefore, it would have been obvious to one of ordinary skill to add opacifying effective amounts of the taught pigment to paper, plastic or coatings.

13. Claims 11, 12, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kreth (US 4885034) in view of Alessandroni (US 2212629).

Alessandroni teaches a dispersant from about .2 to 5.0 percent by weight (col. 2, line 60-col. 3, line 41).

It would have been obvious to one of ordinary skill in the art to use Kreth's pigment composition with Alessandroni's additive in order to enhance the anti-agglomerate effect of the pigment composition.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shalie A. Manlove whose telephone number is (703) 308-8275.

The examiner can normally be reached on M-F 8:00- 5:30.

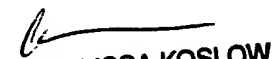
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark L. Bell can be reached on (703) 308-3823. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Shalie A. Manlove  
Examiner  
Art Unit 1755

May 10, 2002



C. MELISSA KOSLOW  
PRIMARY EXAMINER